

Louisville Metro

Multi-Hazards Mitigation Plan Five-Year Update

Executive Summary

Natural Hazard Mitigation Planning: Disaster Mitigation Act of 2000: The Disaster Mitigation Act of 2000 (DMA 2000) is a regulation to improve the hazard mitigation planning process. As a local community, Louisville Metro is required to develop a comprehensive Natural Hazards Mitigation Plan. The legislation reinforces the importance of mitigation planning in emphasizing planning for disasters before they occur. As such, DMA 2000 establishes a “pre-disaster hazard mitigation” program and new requirements for the post-disaster Hazard Mitigation Grant Program (HMGP).

DMA 2000 is intended to facilitate cooperation between state and local authorities as it encourages and rewards local, tribal, and state pre-disaster planning and promotes sustainability as a strategy for disaster resistance. This enhanced planning network better enables local and state governments to articulate their needs for mitigation, resulting in faster allocation of funding and more effective risk reduction projects. As a result, communities must have an approved mitigation plan in place before receiving HMGP funds.

Five Year Update: DMA 2000 requires local communities to update the Hazards Mitigation Plan on a five-year cycle. The 2010 Plan update will be renamed a Multi-Hazard Mitigation Plan and follow all guidance issued by the Federal Emergency Management Agency (FEMA) and the Community Rating System (CRS). In addition, the update will include Hazardous Materials (Haz-Mat) as a Man-Made Hazard to be profiled for a risk assessment analysis. The updated Plan will utilize the same planning process as the original plan and stakeholders will again be at the center of the process.

Summary of the Benefits of Mitigation Planning

- Leads to cost-effective selection of risk reduction actions
- Builds Partnerships
- Contributes to sustainable communities
- Establishes funding profiles

The updated Plan will be based on “best available data.” The Multi-Hazard Mitigation Plan Project Staff will collect information and best available data to analyze the hazards for a Risk Assessment. In Louisville Metro, an enhanced inventory of local structures and public infrastructure will provide a more realistic determination of the vulnerability to the hazards that impact Metro.

Planning Partners: The Louisville Metro Emergency Management Agency (EMA) is primarily responsible for the coordination and development of the local Multi-Hazard Mitigation Plan. Collaborating with EMA on the Plan are both the Louisville & Jefferson County Metropolitan Sewer District (MSD) and Louisville/Jefferson County Information Consortium (LOJIC). LOJIC’s GIS data and mapping capabilities provides Louisville Metro a perfect vehicle for designing a premier mitigation plan.

To ensure commitment and consensus, Louisville Metro’s planning process will again rely on stakeholder involvement and participation as a main source of guidance for all phases of the Plan. Additionally, stakeholder involvement ensures the Plan is comprehensive and that the mitigation strategy is implemented through local programs and regulations.

Plan Update Outline: Areas at-risk in Louisville Metro will be identified, mapped, assessed, and vulnerabilities will be determined so that an appropriate mitigation strategy can be developed. The Plan will contain the following five phases:

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| 1. Prerequisites – Adoption of Governing Body | 3. Risk Assessment |
| 2. Description of the Planning Process | 4. Mitigation Strategies |
| | 5. Plan Maintenance Procedures |

Adoption by Local Governing Body: Metro Council will be required to adopt the Louisville Metro Multi-Hazards Mitigation Plan by Resolution.

Risk Assessment: A comprehensive analysis and review will be completed for Louisville Metro’s vulnerabilities. Throughout the Risk Assessment, maps will be used whenever possible to convey where the spatial data and at-risk areas are located. Maps also provide an invaluable GIS visual tool for analysis.

The Risk Assessment will be divided into five sections, as follows.

- Identifying Hazards
- Profiling Hazard Events
- Assessing Vulnerability: Identifying Assets
- Assessing Vulnerability: Estimating Potential Losses
- Assessing Vulnerability: Analyzing Development Trends

Identifying Hazards: Due to Louisville’s climate, geology, and geographical setting, the Metro area is vulnerable to 12 natural hazards that threaten life and property. As a result, conditions, such as topography, soil characteristics, and meteorological conditions will be reviewed. The Plan update will include identification of hazards where there is a historical record of damage caused to people and property or where the potential for such damage exists.

Profiling Hazard Events: The hazard profiles will target the “at-risk” areas affected by each identified hazard. The purpose of the profiles is to determine the probability, magnitude, and the location and extent that each identified hazard may impact the Louisville Metro area. The profiles will focus on past hazard events and their severity and resulting effects on transportation, safety, and economics.

Identifying Assets: The identification of assets will provide sufficient information to enable the design of a mitigation strategy. Information used to identify the assets will be gathered from resources such as local tax and real estate records, local public works and utilities department infrastructure records, Census data, and GIS databases. Based on the analysis of this information, the Plan will describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities.

Estimating Potential Losses: Loss estimations for each hazard will include the vulnerable population, structures and facilities, economic activity, and environmental resources that are exposed. Louisville Metro’s degree of vulnerability will depend upon the risk of a particular natural hazard occurring (including such factors as scope, frequency, intensity, and destructive potential).

Analyzing Development Trends: The Plan will provide a general description of land uses and development trends within the community so that mitigation options are considered in future land use decisions. All local land use and zoning plans, GIS data, ordinances, emergency operation procedures, and comprehensive plans will be reviewed for hazard data.

Louisville Metro Vulnerable to 12 Natural Hazards

Dam Failure
Drought
Earthquake
Extreme Heat
Flooding
Hailstorms
Karst / Sinkholes
Landslides
Thunderstorms / Lightning
Tornadoes
Wildfire
Winter Storms

Ranking Natural Hazards: The Hazard Risk Gauge will again provide a qualitative assessment of the hazards that could occur in Louisville Metro.

Mitigation Strategy: The mitigation strategy will provide a blueprint for reducing the potential losses identified in the risk assessments. The Mitigation Strategy will outline potential losses and existing mitigation programs and focus on projects that address protecting lives, infrastructure, and the economy.

Five-Year Action Plan: The Mitigation Action Plan will respond to the Risk Assessment with projects and activities to mitigate Louisville's multi-hazards. An updated five-year Action Plan will recommend mitigation projects that can be integrated into job descriptions, comprehensive plans, capital improvement plans, zoning and building codes, and other planning tools. The Action Plan will also outline projects that allow our community to make informed future land use and zoning decisions, design better infrastructure, and keep the public out of harm's way. Included in the Action Plan will be both an implementation timeline and the funding sources to implement each of the mitigation projects. For program funding, the mitigation measures in the Action Plan must be cost effective, environmentally sound, and technically feasible and shovel-ready to submit for various grant programs for funding.

Plan Maintenance Procedures: The Plan will describe the method and schedule of monitoring, evaluating, and updating the Mitigation Plan within a five-year cycle. When updated, the Plan will be reviewed, revised, and resubmitted to the State Hazard Mitigation Officer at Kentucky Division of Emergency Management and to FEMA Region IV. As appropriate, the Plan also will be evaluated after a disaster, or after unexpected changes in land use or demographics in or near hazard areas.

